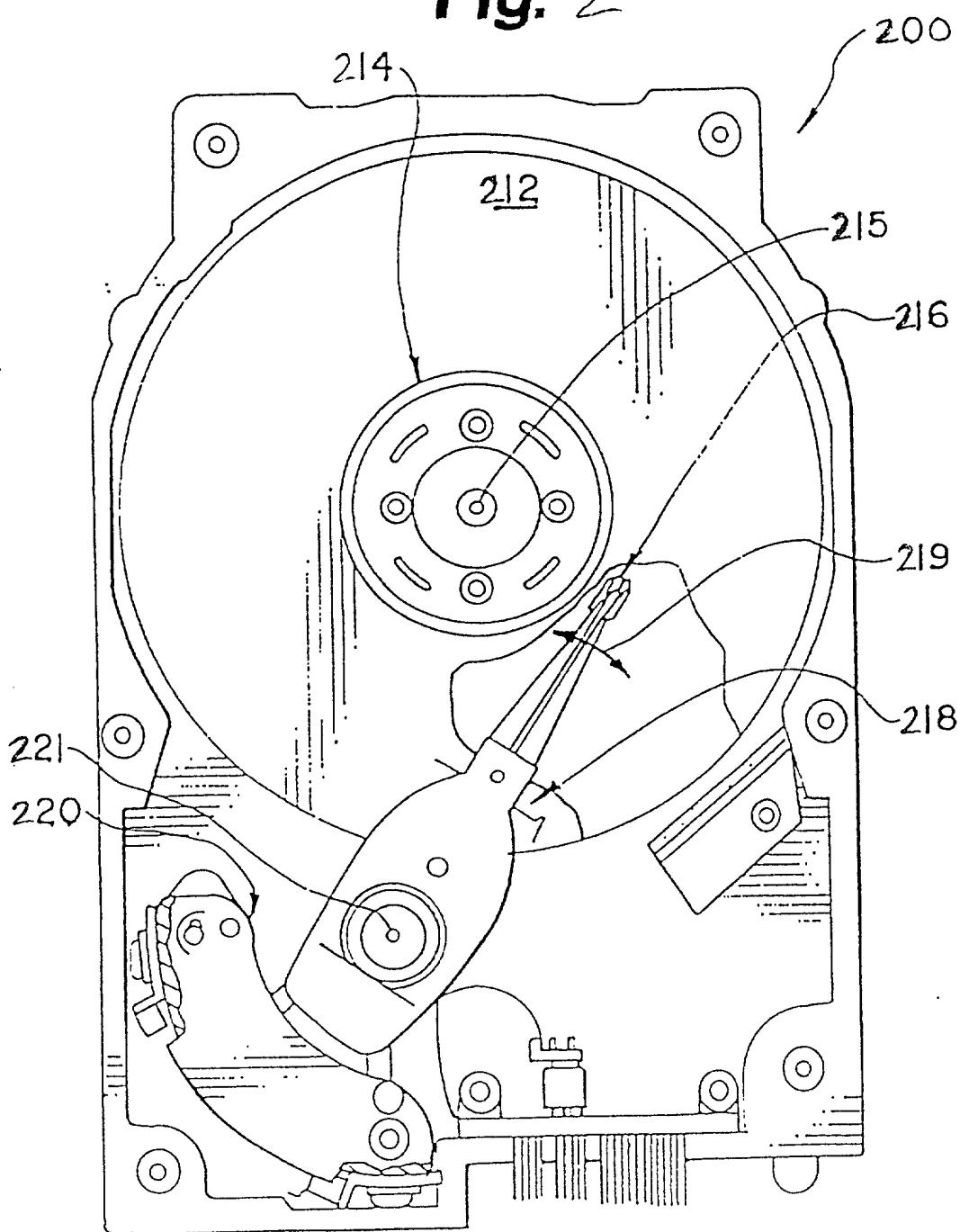


FIG. 1

Fig. 2



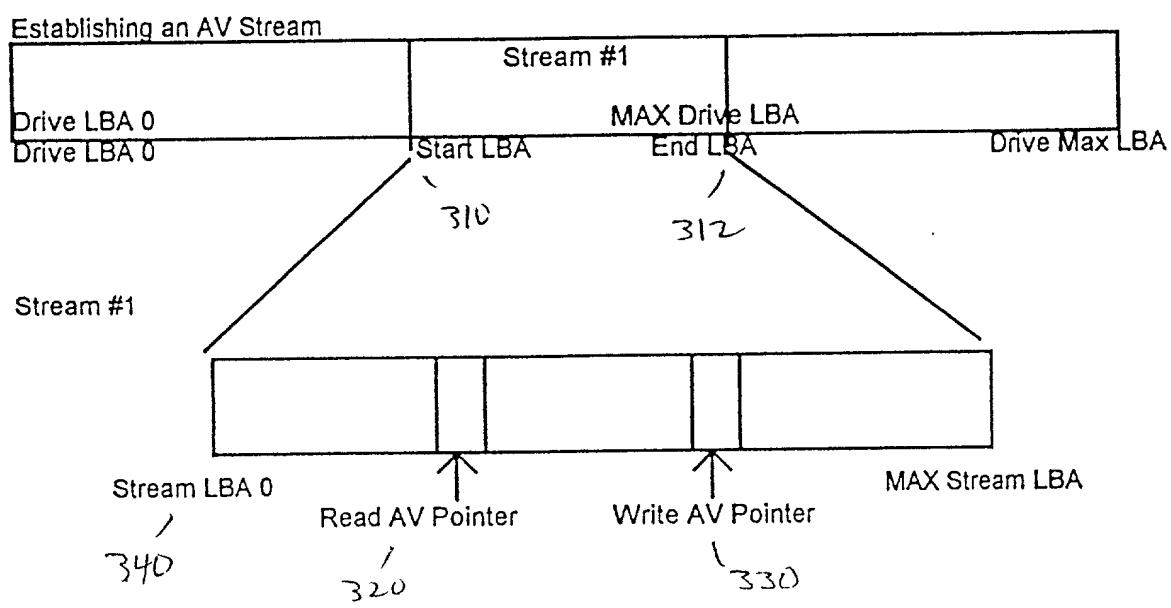


Fig. 3

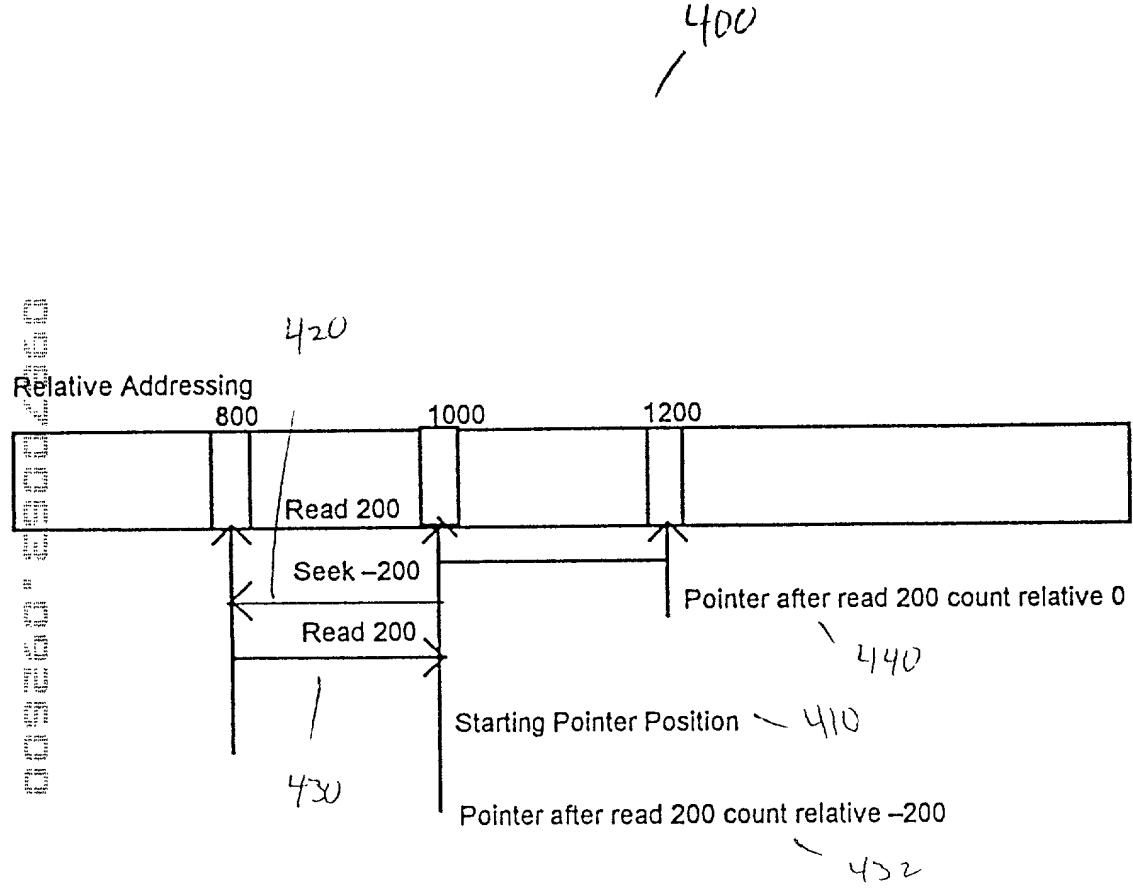


Fig. 4

| Feature Register value | Feature Description |
|------------------------|--|
| 0Bh | Enable AV Stream mode |
| 0Ch | Enable Read Continuous operation |
| 0Dh | Enable Time-base ERP Limitation for Read |
| 0Eh | Enable Time-base ERP Limitation for Write |
| 0Fh | Enable AV Write Cache |
| 8Bh | Disable AV Stream mode |
| 8Ch | Disable Read Continuous operation |
| 8Dh | Disable Time-base ERP Limitation for Read |
| 8Eh | Disable Time-base ERP Limitation for Write |
| 8Fh | Disable AV Write Cache |

Fig. 5

600
/

610

| Register | 7 | 6 | 5 | 4 | 3 | 2 | 1 | 0 |
|---------------|-----|----|-----|-----|---|-----|----|---|
| Features | | | | | | 0Bh | | |
| Sector Count | | | | | | na | | |
| Sector Number | | | | | | na | | |
| Cylinder Low | | | | | | na | | |
| Cylinder High | | | | | | na | | |
| Device/Head | obs | na | obs | DEV | | | na | |
| Command | | | | | | EFh | | |

Fig. 6

700

710

720

| Register | 7 | 6 | 5 | 4 | 3 | 2 | 1 | 0 |
|---------------|-----|----|-----|-----|-----|-----|----|---|
| Features | | | | | | 0Ch | | |
| Sector Count | | | | | na | | ER | |
| Sector Number | | | | | na | | | |
| Cylinder Low | | | | | na | | | |
| Cylinder High | | | | | na | | | |
| Device/Head | obs | na | obs | DEV | | | na | |
| Command | | | | | EFh | | | |

Fig. 7

800

810

| Register | 7 | 6 | 5 | 4 | 3 | 2 | 1 | 0 |
|---------------|-----|----|-----|-----|---|------------------------------------|----|---|
| Features | | | | | | 0Dh | | |
| Sector Count | | | | | | na | | |
| Sector Number | | | | | | na | | |
| Cylinder Low | | | | | | Maximum time in milliseconds (lsb) | | |
| Cylinder High | | | | | | Maximum time in milliseconds (msb) | | |
| Device/Head | obs | na | obs | DEV | | | na | |
| Command | | | | | | EFh | | |

822

832

Fig. 8

900

/

910

| Register | 7 | 6 | 5 | 4 | 3 | 2 | 1 | 0 |
|---------------|-----|----|-----|-----|---|------------------------------------|----|----|
| Features | | | | | | 0Eh | | |
| Sector Count | | | | | | na | | |
| Sector Number | | | | | | na | | ER |
| Cylinder Low | | | | | | Maximum time in milliseconds (lsb) | | |
| Cylinder High | | | | | | Maximum time in milliseconds (msb) | | |
| Device/Head | obs | na | obs | DEV | | | na | |
| Command | | | | | | EFh | | |

914

916

930

912

916

922

932

Fig. 9

1000
1

101D

| Register | 7 | 6 | 5 | 4 | 3 | 2 | 1 | 0 |
|---------------|-----|----|-----|-----|---|---|-----|---|
| Features | | | | | | | na | |
| Sector Count | | | | | | | na | |
| Sector Number | | | | | | | na | |
| Cylinder Low | | | | | | | na | |
| Cylinder High | | | | | | | na | |
| Device/Head | obs | na | obs | DEV | | | na | |
| Command | | | | | | | FAh | |

Fig. 10

1020

1110

| Register | 7 | 6 | 5 | 4 | 3 | 2 | 1 | 0 |
|---------------|-----|------|-----|-----|-----|------|----|-----|
| Error | na | na | na | na | na | ABRT | na | na |
| Sector Count | | | | | na | | | |
| Sector Number | | | | | na | | | |
| Cylinder Low | | | | | na | | | |
| Cylinder High | | | | | na | | | |
| Device/Head | obs | na | obs | DEV | | | na | |
| Status | BSY | DRDY | DF | na | DRQ | na | na | ERR |

Fig. 11

1000

1200

| | | | | | | | | | | | | | | | | |
|-----|----|----|----|----|----|----|---|---|---|---|---|---|---|---|---|---------------------|
| | 15 | 14 | 13 | 12 | 11 | 10 | 9 | 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 | 0 |
| 0 | | | | | | | | | | | | | | | | Stream Number |
| 1 | | | | | | | | | | | | | | | | Link Stream Number |
| 2 | | | | | | | | | | | | | | | | reserved |
| 3 | | | | | | | | | | | | | | | | reserved |
| 4 | | | | | | | | | | | | | | | | Stream Starting LBA |
| 5 | | | | | | | | | | | | | | | | 1240 |
| 6 | | | | | | | | | | | | | | | | 1244 |
| 7 | | | | | | | | | | | | | | | | Stream Ending LBA |
| 8 | | | | | | | | | | | | | | | | 1242 |
| 9 | | | | | | | | | | | | | | | | --- |
| 10 | | | | | | | | | | | | | | | | |
| 11 | | | | | | | | | | | | | | | | |
| ... | | | | | | | | | | | | | | | | ... |
| 255 | | | | | | | | | | | | | | | | reserved |

1250

Fig. 12

1300

| Register | 7 | 6 | 5 | 4 | 3 | 2 | 1 | 0 |
|---------------|---------------|----|-----|-----|---|---|---|----|
| Features | Stream Number | | | | | | | |
| Sector Count | na | | | | | | | |
| Sector Number | na | | | | | | | |
| Cylinder Low | na | | | | | | | |
| Cylinder High | na | | | | | | | |
| Device/Head | obs | na | obs | DEV | | | | na |
| Command | FAh | | | | | | | |

Fig. 13

1400

/

1410

| Register | 7 | 6 | 5 | 4 | 3 | 2 | 1 | 0 |
|---------------|-----|------|-----|-----|-----|------|----|-----|
| Error | na | na | na | na | na | ABRT | na | na |
| Sector Count | | | | | na | | | |
| Sector Number | | | | | na | | | |
| Cylinder Low | | | | | na | | | |
| Cylinder High | | | | | na | | | |
| Device/Head | obs | na | obs | DEV | | | na | |
| Status | BSY | DRDY | DF | na | DRQ | na | na | ERR |

Fig. 14

1500

1520

| Register | 7 | 6 | 5 | 4 | 3 | 2 | 1 | 0 |
|---------------|------------------|----|-----|-----|-----|---|----|---|
| Features | AV Stream Number | | | | | | | |
| Sector Count | | | | | na | | | |
| Sector Number | | | | | na | | | |
| Cylinder Low | | | | | na | | | |
| Cylinder High | | | | | na | | | |
| Device/Head | obs | na | obs | DEV | | | na | |
| Command | | | | | FCh | | | |

Fig. 15

1600

1510

| Register | 7 | 6 | 5 | 4 | 3 | 2 | 1 | 0 |
|---------------|-----|------|-----|-----|-----|----|----|-----|
| Error | na | | | | | | | |
| Sector Count | | | | | na | | | |
| Sector Number | | | | | na | | | |
| Cylinder Low | | | | | na | | | |
| Cylinder High | | | | | na | | | |
| Device/Head | obs | na | obs | DEV | | | na | |
| Status | BSY | DRDY | DF | na | DRQ | na | na | ERR |

Fig. 16

17⁰⁰
/ 1710

| Register | 7 | 6 | 5 | 4 | 3 | 2 | 1 | 0 |
|---------------|-----|------|-----|-----|-----|------|----|-----|
| Error | na | na | na | na | na | ABRT | na | na |
| Sector Count | | | | | na | | | |
| Sector Number | | | | | na | | | |
| Cylinder Low | | | | | na | | | |
| Cylinder High | | | | | na | | | |
| Device/Head | obs | na | obs | DEV | | | na | |
| Status | BSY | DRDY | DF | na | DRQ | na | na | ERR |

Fig. 17

1820

| Register | 7 | 6 | 5 | 4 | 3 | 2 | 1 | 0 |
|---------------|------------------|---------|-----|-----|---|---|-----|---|
| Features | AV Stream Number | | | | | | | |
| Sector Count | Function Code | | | | | | | |
| Sector Number | LBA | | | | | | | |
| Cylinder Low | LBA | | | | | | | |
| Cylinder High | LBA | | | | | | | |
| Device/Head | obs | LB A | obs | DEV | | | LBA | |
| Command | C3h | | | | | | | |

Fig. 18

1822

1900
/ 1910
1920 1908

| Value in Sector Count | Action |
|-----------------------|-----------------------------|
| 0 | Set the Read AV Pointer |
| 1 | Set the Write AV Pointer |
| 2 | Return the Read AV Pointer |
| 3 | Return the Write AV Pointer |
| 4-255 | Reserved |

Fig. 19

2000



| Register | 7 | 6 | 5 | 4 | 3 | 2 | 1 | 0 |
|---------------|-----|------|-----|-----|---------------|-----|----|-----|
| Error | | | | | Stream Number | | | |
| Sector Count | | | | | Function Code | | | |
| Sector Number | | | | | LBA | | | |
| Cylinder Low | | | | | LBA | | | |
| Cylinder High | | | | | LBA | | | |
| Device/Head | obs | LBA | obs | DEV | | LBA | | |
| Status | BSY | DRDY | DF | na | DRQ | na | na | ERR |

Fig 20

2100

| Register | 7 | 6 | 5 | 4 | 3 | 2 | 1 | 0 |
|---------------|-----|------|-----|-----|-----|------|----|-----|
| Error | na | na | na | na | na | ABRT | na | na |
| Sector Count | | | | | na | | | |
| Sector Number | | | | | na | | | |
| Cylinder Low | | | | | na | | | |
| Cylinder High | | | | | na | | | |
| Device/Head | obs | na | obs | DEV | | na | | |
| Status | BSY | DRDY | DF | na | DRQ | na | na | ERR |

Fig 21

| Register | 7 | 6 | 5 | 4 | 3 | 2 | 1 | 0 |
|---------------|-----|---------|-----|-----|------------------|------------------|---|---|
| Features | | | | | AV Stream Number | | | |
| Sector Count | | | | | Sector count | | | |
| Sector Number | | | | | Relative Address | | | |
| Cylinder Low | | | | | Relative Address | | | |
| Cylinder High | | | | | Relative Address | | | |
| Device/Head | obs | LB A | obs | DEV | | Relative Address | | |
| Command | | | | | CEh | | | |

Fig 22

2230

2200

2220

2240

2210

2300

1

| Register | 7 | 6 | 5 | 4 | 3 | 2 | 1 | 0 |
|---------------|-----|------|-----|-----|-----|-----|----|-----|
| Error | | | | | na | | | |
| Sector Count | | | | | na | | | |
| Sector Number | | | | | LBA | | | |
| Cylinder Low | | | | | LBA | | | |
| Cylinder High | | | | | LBA | | | |
| Device/Head | obs | na | obs | DEV | | LBA | | |
| Status | BSY | DRDY | DF | na | DRQ | na | PP | ERR |

Fig. 23

2310

2400

| Register | 7 | 6 | 5 | 4 | 3 | 2 | 1 | 0 |
|---------------|------|------|-----|------|-----|------|----|-----|
| Error | ICRC | WP | MC | IDNF | MCR | ABRT | NM | na |
| Sector Count | | | | | na | | | |
| Sector Number | | | | | na | | | |
| Cylinder Low | | | | | na | | | |
| Cylinder High | | | | | na | | | |
| Device/Head | obs | na | obs | DEV | | na | | |
| Status | BSY | DRDY | DF | na | DRQ | na | na | ERR |

Fig. 24

2500

| Register | 7 | 6 | 5 | 4 | 3 | 2 | 1 | 0 |
|---------------|-----|---------|-----|-----|------------------|------------------|---|---|
| Features | | | | | AV Stream Number | | | |
| Sector Count | | | | | Sector count | | | |
| Sector Number | | | | | Relative Address | | | |
| Cylinder Low | | | | | Relative Address | | | |
| Cylinder High | | | | | Relative Address | | | |
| Device/Head | obs | LB A | obs | DEV | | Relative Address | | |
| Command | | | | | CFh | | | |

2530

2510

Fig. 25

2520

2540

| Register | 7 | 6 | 5 | 4 | 3 | 2 | 1 | 0 |
|---------------|-----|------|-----|-----|-----|----|----|-----|
| Error | | | | | na | | | |
| Sector Count | | | | | na | | | |
| Sector Number | | | | | na | | | |
| Cylinder Low | | | | | na | | | |
| Cylinder High | | | | | na | | | |
| Device/Head | obs | na | obs | DEV | | | na | |
| Status | BSY | DRDY | DF | PP | DRQ | na | na | ERR |

2600

2610

Fig. 26

2700

2710

| Register | 7 | 6 | 5 | 4 | 3 | 2 | 1 | 0 |
|---------------|------|------|-----|------|-----|------|-----|------|
| Error | ICRC | WP | MC | IDNF | MCR | ABRT | NM | DFER |
| Sector Count | | | | | na | | | |
| Sector Number | | | | | LBA | | | |
| Cylinder Low | | | | | LBA | | | |
| Cylinder High | | | | | LBA | | | |
| Device/Head | obs | na | obs | DEV | | | LBA | |
| Status | BSY | DRDY | DF | na | DRQ | na | na | ERR |

Fig. 27

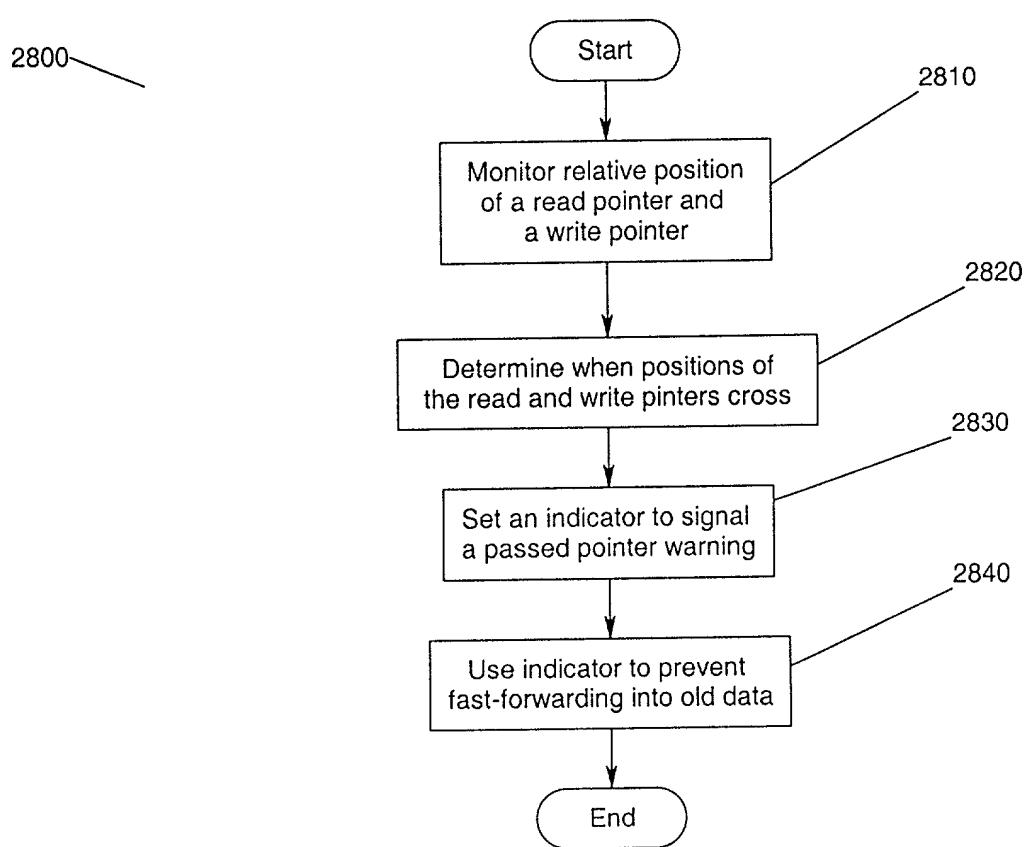


Fig. 28